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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR   | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|------------------------|---------------------|------------------|
| 10/564,010  | 01/11/2006  | Richard Anthony Borman | •                   | 8896             |
| 7590<br>RICHARD A. BORMAN<br>45 HUDDLESTON WAY, SAWSTON, CAMBRIDGE, |             |                        | EXAMINER            |                  |
|   |             |                        | RAO, SAVITHA M      |                  |
| CAMBRIDGESHIRE<br>SAWSTON, CB2 4SW                                  |             | ART UNIT               | PAPER NUMBER        |                  |
| UNITED KINGDOM  |             |                        | 1614                | •                |
|   |             |                        |                     |                  |
|   |             |                        | MAIL DATE           | DELIVERY MODE    |
|   |             |                        | 06/24/2009          | PAPER            |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

# Application No. Applicant(s) 10/564.010 BORMAN ET AL. Office Action Summary Examiner Art Unit SAVITHA RAO 1614 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS. WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filed on 02/24/2009. 2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 92-97 and 99-114 is/are pending in the application. 4a) Of the above claim(s) 92-95 and 99-114 is/are withdrawn from consideration. 5) Claim(s) \_\_\_\_\_ is/are allowed. 6) Claim(s) 96 and 97 is/are rejected. 7) Claim(s) \_\_\_\_\_ is/are objected to. 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are; a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abevance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some \* c) None of: Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). \* See the attached detailed Office action for a list of the certified copies not received. Attachment(s)

1) Notice of References Cited (PTO-892)

Information Disclosure Statement(s) (PTO/S5/08)
Paper No(s)/Mail Date \_\_\_\_\_\_.

Notice of Draftsperson's Patent Drawing Review (PTO-948)

Interview Summary (PTO-413)
Paper No(s)/Mail Date.

6) Other:

5) Notice of Informal Patent Application

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#### DETAILED ACTION

Claims 92-97 and 99-114 are pending .

Receipt and consideration of Applicants' amended claim set and remarks/arguments filed on 02/24/2009 is acknowledged. Claim 96 is amended, claim 98 is cancelled and claims 92-95 and 99-114 are withdrawn as being drawn to non-elected invention. Claims 96-97 are under consideration in the instant office action.

Applicants' arguments, filed 02/24/2009, have been fully considered but they are not deemed to be persuasive. Rejections and/or objections not reiterated from previous office actions are hereby withdrawn. The following rejections and/or objections are either reiterated or newly applied. They constitute the complete set presently being applied to the instant application.

### Claim Rejections - 35 USC § 103

This rejection is necessitated by the newly submitted claims filed on 02/24/2009.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in Graham v. John Deere Co., 383 U.S. 1, 148

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USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- Determining the scope and contents of the prior art.
- Ascertaining the differences between the prior art and the claims at issue.
- Resolving the level of ordinary skill in the pertinent art.
- Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 96-97 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dowevko et al (US 2006/0223110).

Current amendment to instant claim 96 has the following deletion i.e. where in R5 is selected from a group consisting of optionally substituted C1-6 alkyl, C3-7 cycloalkyl etc. and  $R_4$  is an optionally substituted bi  $C_{1-7}$  aryl group and the deletion of the proviso statement which is the last three lines of the claim. Instant claims are drawn towards the following compound (103N from page 97 of the instant disclosure). As such the newly amended claim does not encompass the original compound elected by the applicant.

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The search has therefore been extended to the following compound encompassed by the currently amended claim.

Doweyko et al teaches the following compound (2e) (see structure below) (page 29, section [0320]

The only difference between the compound taught by Doweyko and the instantly claimed compounds encompassed by the generic formula of instant claim 96 is the substitution in the imidazole ring, instead of H in position 5 of the imidazole ring as taught by Doweyko, instant claims recite substitution of a C1-6 alkyl, C3-7 cycloalkyl etc group in addition to the napthyl and amine substituents. It has been determined by the court that hydrogen and methyl are deemed obvious variants, *In-re Wood* 199

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USPQ 137. Accordingly, it would have been obvious for one of ordinary skill in the art to substitute methyl group for the hydrogen group in the imidazole ring.

The differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. A person of ordinary skill in the art would have been motivated to further modify the compounds disclosed by Doweyko et. al. to add a methyl substitution instead of H on the imidazole ring. The instantly claimed compounds read on structural homologs of the reference compounds. Hydrogen and methyl are adjacent homologue. Accordingly, one having ordinary skill in the art would have been motivated to prepare the instantly claimed compound because such structurally homologous compounds are expected to possess similar properties. To those skilled in chemical art, one homologue is not such an advance over adjacent member of series as requires invention because chemists knowing properties of one member of series would in general know what to expect in adjacent members In re Henze, 85 USPQ 261 (1950). . Therefore, the unsubstituted position comprising the hydrogen mojety in the imidazole structure adequately suggests to the pharmaceutical a possible methyl group on the imidazole structure. Therefore, the claims are prima facie obvious over the prior art. It is also noted that has been held that compounds that are structurally homologous to prior art compounds are prima facie obvious, absent a showing of unexpected results. In re-Hass, 60 USPQ 544 (CCPA 1944):

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## Response to applicant's arguments filed on 02/24/2009:

In light of the new grounds of rejection above, the arguments submitted on 02/24/2009 which was for the previously submitted rejection is moot.

#### Conclusion

## Claims 96-97 are rejected. No claims are allowed

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SAVITHA RAO whose telephone number is (571)270-5315. The examiner can normally be reached on Mon-Fri 7.00 am to 4.00 pm..

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ardin Marschel can be reached on 571-272-0718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <a href="http://pair-direct.uspto.gov">http://pair-direct.uspto.gov</a>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/SAVITHA RAO/

Examiner, Art Unit 1614

/Ardin Marschel/

Supervisory Patent Examiner, Art Unit 1614